CLAIMS

1. An articulated industrial robot, comprising: a robot arm including a plurality of arm components swingably connected to one another by connection shafts; and a base to which the robot arm is connected, wherein

the robot arm includes arm actuation means for swinging the arm components,

the arm components includes a first arm component at a tip side of the robot arm, the first arm component having a wrist at its tip-side end, and

the arm components includes a second arm component which is closer to the base than the first arm component is, the second arm component being divided at an axially intermediate position into a base-side part and a tip-side part, and the second arm component having rotation means for rotating the tip-side part around the arm axis relative to the base-side part.

2. The industrial robot of claim 1, wherein:

the rotation means includes a drive shaft extending in the arm axis direction and having a thread groove in its outer surface, a moving device for axially moving the drive shaft, and a threaded member meshed with the thread groove of the drive shaft; and

the moving device is fixed to one of the base-side part and the tip-side part, while the threaded member is fixed to the other.

3. The industrial robot of claim 2, wherein:

the base-side part and the tip-side part are hollow; and

the moving device is contained in one of the base-side part and the tip-side part, while the threaded member is contained in the other.

4. The industrial robot of claim 2 or 3, wherein the moving device includes a nut meshed with the thread groove of the drive shaft, a motor for rotating the nut around the drive shaft, and a speed reduction mechanism for reducing a rotation speed of the output shaft of the motor to transmit a torque of the motor to the nut.

5. The industrial robot of any one of claims 1 to 4, wherein the first arm component includes wrist actuation means for reciprocating the wrist in the arm axis direction.